

**WHAT IS CLAIMED IS:**

1. A rewrite control apparatus for an onboard program,  
comprising:

5 an onboard controller provided in a vehicle,  
wherein a storage medium of an information collection  
controller of said onboard controller is provided with a data  
area for storing vehicle condition data;

wherein when a command to rewrite the onboard  
10 program into a new onboard program is given, said rewrite  
control apparatus writes and saves the vehicle condition data  
stored in said data area into a storage area which is in said  
storage medium and is different from said data area, or into a  
storage medium different from said storage medium, and  
15 executes rewrite processing of rewriting the onboard program  
into the new onboard program; and

wherein when said rewrite processing is finished, said  
rewrite control apparatus performs processing of writing the  
saved vehicle condition data back into said data area.

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2. The rewrite control apparatus for an onboard program  
according to Claim 1,

wherein while said vehicle condition data is saved, said  
data area is used as a buffer area for the onboard program.

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3. The rewrite control apparatus for an onboard program according to Claim 1,

wherein the storage medium different from said storage medium is at least any one of a storage medium provided in said information collection controller separately from said storage medium, a storage medium which is inside said vehicle and provided outside said information collection controller, and a storage medium in a server which is outside said vehicle and communicably connected to said onboard controller by communication means.

4. The rewrite control apparatus for an onboard program according to Claim 3,

wherein while said vehicle condition data is saved, said data area is used as a buffer area for the onboard program.

5. A rewrite control apparatus for an onboard program, comprising:

severs;  
an onboard controller provided in a vehicle; and  
communication means for communicably connecting said servers and said onboard controller,

wherein said rewrite control apparatus has i) a normal operation mode for transmitting and receiving a vehicle condition between said servers and said onboard controller and

ii) a rewrite mode for rewriting the onboard program of said onboard controller into a new onboard program transmitted from said servers, which are switchable in a communication state; and

5            wherein when an onboard program rewrite command is issued from said servers, said rewrite control apparatus switches from the normal operation mode to the rewrite mode, and when a command to switch to the normal operation mode is transmitted during the rewrite mode, said rewrite control  
10   apparatus switches from the rewrite mode to the normal operation mode.

6.        The rewrite control apparatus for an onboard program according to Claim 5,

15           wherein said switching command is based on a signal from timer means or a logout signal.

7.        A rewrite control apparatus for an onboard program, comprising:

20           a server;  
            an onboard controller provided in a vehicle; and  
            communication means for communicably connecting said server and said onboard controller,

            wherein when said server is to execute rewrite  
25   processing of an onboard program of said onboard controller

via said communication means, said server determines whether it should execute the rewrite processing of said onboard program or not by referring to a memory content of said onboard controller.

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8. The rewrite control apparatus for an onboard program according to Claim 7,

wherein when said server determines whether it should execute the rewrite processing of said onboard program or not, said server compares the memory content of said onboard controller and a memory content of a master file.

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9. The rewrite control apparatus for an onboard program according to Claim 7,

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wherein when said server determines whether it should execute the rewrite processing of said onboard program or not, said server checks the vehicle condition data of said vehicle, and when a content thereof indicates a state in which start of said vehicle is locked, said server does not execute the rewrite processing.

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10. The rewrite control apparatus for an onboard program according to Claim 7,

wherein when said server determines whether it should execute the rewrite processing of said onboard program or not,

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said server compares the memory content of said onboard controller and a memory content of a master file, and checks the vehicle condition data of said vehicle, and when contents thereof indicate a state in which start of said vehicle is locked,  
5 said server does not execute the rewrite processing.

11. The rewrite control apparatus for an onboard program according to Claim 7,

wherein when said server determines whether it should  
10 execute the rewrite processing of said onboard program or not, said server checks the vehicle condition data of said vehicle, and when a content thereof indicates that said vehicle is located at a specified position, said server executes the rewrite processing.

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12. The rewrite control apparatus for an onboard program according to Claim 7,

wherein when said server determines whether it should execute the rewrite processing of said onboard program or not,  
20 said server compares the memory content of said onboard controller and a memory content of a master file, and checks the vehicle condition data of said vehicle, and when contents thereof indicate that said vehicle is located at a specified position, said server executes the rewrite processing.

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13. The rewrite control apparatus for an onboard program according to Claim 7,

wherein the memory content of said onboard controller includes at least any one of said onboard program and vehicle  
5 condition data.

14. The rewrite control apparatus for an onboard program according to Claim 13,

wherein when said server determines whether it should  
10 execute the rewrite processing of said onboard program or not, said server compares the memory content of said onboard controller and a memory content of a master file.

15. The rewrite control apparatus for an onboard program according to Claim 13,

wherein when said server determines whether it should execute the rewrite processing of said onboard program or not, said server checks the vehicle condition data of said vehicle, and when a content thereof indicates a state in which start of  
20 said vehicle is locked, said server does not execute the rewrite processing.

16. The rewrite control apparatus for an onboard program according to Claim 13,

25 wherein when said server determines whether it should

execute the rewrite processing of said onboard program or not,  
said server compares the memory content of said onboard  
controller and a memory content of a master file, and checks the  
vehicle condition data of said vehicle, and when contents  
5 thereof indicate a state in which start of said vehicle is locked,  
said server does not execute the rewrite processing.

17. The rewrite control apparatus for an onboard program  
according to Claim 13,  
10 wherein when said server determines whether it should  
execute the rewrite processing of said onboard program or not,  
said server checks the vehicle condition data of said vehicle,  
and when a content thereof indicates that said vehicle is located  
at a specified position, said server executes the rewrite  
15 processing.

18. The rewrite control apparatus for an onboard program  
according to Claim 13,  
wherein when said server determines whether it should  
20 execute the rewrite processing of said onboard program or not,  
said server compares the memory content of said onboard  
controller and a memory content of a master file, and checks the  
vehicle condition data of said vehicle, and when contents  
thereof indicate that said vehicle is located at a specified  
25 position, said server executes the rewrite processing.